



1

#5

SEQUENCE LISTING

<110> HOFFFLER, JAMES
RUSSELL, MARIJANE

<120> SINGLE CHAIN ANTIBODY FUSION REAGENTS THAT REGULATE
TRANSCRIPTION IN VIVO

<130> 039322/0226

<140> 09/939,769

<141> 2001-08-28

<150> 08/728,890

<151> 1996-10-10

<160> 96

<170> PatentIn Ver. 2.1

<210> 1

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative
mitochondrial target signal

<400> 1

Met Ser Val Leu Thr Pro Leu Leu Leu Arg Gly Leu Thr Gly Ser Ala
1 5 10 15

Arg Arg Leu Pro Val Pro Arg Ala Lys Ile His Ser Leu
20 25

<210> 2

<211> 20

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Illustrative
mitochondrial target signal

<400> 2

Met Glu Thr Asp Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro Gly
1 5 10 15

Ser Thr Gly Asp
20

<210> 3

<211> 24

<212> DNA

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<223> Description of Artificial Sequence: Primer

<400> 3
tggaagagggc acgttctttt cttt 24

<210> 4
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<223> Description of Artificial Sequence: Primer

<400> 4
gtccaccttg gtgttgctgg gctt 24

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agactctccc ctgttgaagc tctt 24

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<400> 6
tgaagattct gtaggggcca ctgtctt 27

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<400> 7
caggtgcagc tgggtgcagtc tgg 23

<210> 8
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caggtgcagc tgggtggagtc tgg

23

<210> 9

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<223> Description of Artificial Sequence: Primer

<400> 9

caggtccagc ttgtgcagtc tgg

23

<210> 10

<211> 23

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<213> Artificial Sequence

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<400> 10

caggtcacct tgaaggagtc tgg

23

<210> 11

<211> 23

<212> DNA

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<223> Description of Artificial Sequence: Primer

<400> 11

cagatcacct tgaaggagtc tgg

23

<210> 12

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<212> DNA

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<400> 12

caggtgcagc tgggtggagtc tgg

23

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<400> 13
caggtgcagc tggtgcagtc tgg

23

<210> 14
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caggtgcagc tggtgcagtc tgc

23

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gaggtgcagc tggtgcagtc tgg

23

<210> 16
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gaggtgcagc tggtggagtc tgg

23

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caggtacagc tgcagcagtc agg

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<210> 19
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gtcctcgcaa ctgcggccca gccggccatg gcccaggtgc agctggtgga gtctgg 56

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<210> 23
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<210> 24
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<223> Description of Artificial Sequence: Primer

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<211> 56

<212> DNA

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<210> 29

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<212> DNA

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<223> Description of Artificial Sequence: Primer

<400> 29

tgaggagacg gtgaccaggg tgcc 24

<210> 30

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

<400> 30

tgaggagaca gtgaccaggg tgcc 24

<210> 31

<211> 24

<212> DNA

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<223> Description of Artificial Sequence: Primer

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tgaagagacg gtgaccattg tccc 24

<210> 32

<211> 24

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<223> Description of Artificial Sequence: Primer

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tgaggagacg gtgaccaggg tccc

24

<210> 33

<211> 24

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<223> Description of Artificial Sequence: Primer

<400> 33

tgaggagacg gtgaccaggg ttcc

24

<210> 34

<211> 24

<212> DNA

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<223> Description of Artificial Sequence: Primer

<400> 34

tgaggagacg gtgaccgtgg tccc

24

<210> 35

<211> 36

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<223> Description of Artificial Sequence: Primer

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gagtcattct cgtgtcgtca cggtgaccag ggtgcc

36

<210> 36

<211> 36

<212> DNA

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<223> Description of Artificial Sequence: Primer

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gagtcattct cgtgtcgaca cagtgaccag ggtgcc

36

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<223> Description of Artificial Sequence: Primer

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 gagtcattct cgtgtcgaca cggtgaccat tgtccc 36

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<223> Description of Artificial Sequence: Primer

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<210> 41
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<400> 41
 gacatccaga tgaccagtc tcc 23

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gatattgtga tgacccagwc tcc 23

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gaaattgtgy tgacwcagtc tcc 23

<210> 44
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gaaacgacac tcacgcagtc tcc 23

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gagattgtga tgacccagac tcc 23

<210> 47
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gaccacgtga tgacccagtc tcc 23

<210> 48
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tgagcacaca gtgcactcga catccagatg acccagtc c 41

<210> 49
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tgagcacaca gtgcactcga tattgtgatg acccagwctc c 41

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<400> 51

tgagcacaca gtgcactcga catcgtgatg acccagtctc c

41

<210> 52

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tgagcacaca gtgcactcga aacgacactc acgcagtctc c

41

<210> 53

<211> 41

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<223> Description of Artificial Sequence: Primer

<400> 53

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41

<210> 54

<211> 41

<212> DNA

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<223> Description of Artificial Sequence: Primer

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tgagcacaca gtgcactcga ccacgtgatg acccagtctc c

41

<210> 55

<211> 24

<212> DNA

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acgtttgatg tccascttgg tccc

24

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<211> 24

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<223> Description of Artificial Sequence: Primer

<400> 56

acgtttgata tccacttttg tccc

24

<210> 57

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<223> Description of Artificial Sequence: Primer

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acgtttaatc tccagtcgtg tccc

24

<210> 58

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<223> Description of Artificial Sequence: Primer

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gagtcattct cgacttgagg ccgcacgttt gatytcacc ttggtccc

48

<210> 59

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<212> DNA

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<223> Description of Artificial Sequence: Primer

<400> 59

gagtcattct cgacttgagg ccgcacgttt gatatccact ttggtccc

48

<210> 60

<211> 48

<212> DNA

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<223> Description of Artificial Sequence: Primer

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gagtcattct cgacttgagg ccgcacgttt aatctccagt cgtgtccc

48

<210> 61
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<223> Description of Artificial Sequence: Primer

<400> 61
cagtctgtgy tgackcagcc gcc

23

<210> 62
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<223> Description of Artificial Sequence: Primer

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ctgtgctgac kcagccrccc tca

23

<210> 63
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<223> Description of Artificial Sequence: Primer

<400> 63
cagtctgccc tgactcagcc tgc

23

<210> 64
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<223> Description of Artificial Sequence: Primer

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cagactgtgg tgaccagga gcc

23

<210> 65
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tcctctgagc tgagtcagca gcc

23

<210> 66
<211> 23
<212> DNA
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<223> Description of Artificial Sequence: Primer

<400> 66
caggctgtgg tgactcagga gcc

23

<210> 67
<211> 23
<212> DNA
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<223> Description of Artificial Sequence: Primer

<400> 67
ctgtggtgac ccaggagcca tca

23

<210> 68
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cagcctgtgc tgactcagcc acc

23

<210> 69
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<223> Description of Artificial Sequence: Primer

<400> 69
cctatgagct gactcagcca ctc

23

<210> 70
<211> 41
<212> DNA
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<223> Description of Artificial Sequence: Primer

<400> 70
tgagcacaca gtgcactcca gtctgtgytg ackcagccgc c 41

<210> 71
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 71
tgagcacaca gtgcactcct gtgctgackc agccrccctc a 41

<210> 72
<211> 41
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

<400> 72
tgagcacaca gtgcactcca gtctgccctg actcagcctg c 41

<210> 73
<211> 41
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 73
tgagcacaca gtgcactcca gactgtggtg acccaggagc c 41

<210> 74
<211> 41
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<220>
<223> Description of Artificial Sequence: Primer

<400> 74
tgagcacaca gtgcactctc ctctgagctg agtcagcagc c 41

<210> 75
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<212> DNA
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<223> Description of Artificial Sequence: Primer

<400> 75

tgagcacaca gtgcactcca ggctgtggtg actcaggagc c 41

<210> 76

<211> 41

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

<400> 76

tgagcacaca gtgcactcct gtggtgaccc aggagccatg a 41

<210> 77

<211> 41

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

<400> 77

tgagcacaca gtgcactcca gcctgtgctg actcagccac c 41

<210> 78

<211> 41

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

<400> 78

tgagcacaca gtgcactccc tatgagctga ctcagccact c 41

<210> 79

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

<400> 79

acctaggacg gtgaccttgg tccc 24

<210> 80

<211> 24

<212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 80

acctaggacg gtcagctygg tccc

24

<210> 81

<211> 24

<212> DNA

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<223> Description of Artificial Sequence: Primer

<400> 81

acctaaaatg atcagctggg ttcc

24

<210> 82

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 82

accgaggacg gtcaccttgg tggc

24

<210> 83

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 83

gagtcattct cgacttgagg ccgcacctag gacctyggtc cc

42

<210> 84

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 84

gagtcattct cgacttgagg ccgcacctag gacggtcagc ttggtccc

48

<210> 85
<211> 48
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 85
gagtcattct cgacttgagg ccgcacctaa aatgatcagc tgggttcc

48

<210> 86
<211> 48
<212> DNA
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<220>

<223> Description of Artificial Sequence: Primer

<400> 86
gagtcattct cgacttgagg ccgcaccgag gacggtcagg ttggtggc

48

<210> 87
<211> 38
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<223> Description of Artificial Sequence: Primer

<400> 87
agtggcccag ccggccaaat tcaagttaca tgtgaatt

38

<210> 88
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<223> Description of Artificial Sequence: Primer

<400> 88
gaggcggccg cacttcctga gggctgtgac tggg

34

<210> 89
<211> 30
<212> DNA
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<223> Description of Artificial Sequence: Primer

<400> 89
gtcgaattcc cacaagtcca aacagttcag

30

<210> 90
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<223> Description of Artificial Sequence: Primer

<400> 90
 actgtcgact taatactgtc cactgctagt ttg

33

<210> 91
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: myc epitope
 tag

<400> 91
 Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn
 1 5 10

<210> 92
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 peptide

<400> 92
 Asp Pro Lys Lys Lys Arg Lys Val
 1 5

<210> 93
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative
 endoplasmic reticulum retention signal

<400> 93
 Ser Glu Lys Asp Glu Leu
 1 5

<210> 94
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: 6-His tag

<400> 94

His His His His His His

1

5

<210> 95

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 95

gaattcccg g gatccgtcg acctgcag

28

<210> 96

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide linker

<400> 96

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser

1

5

10

15